

Work Order ID 136885

136885

Page 1

Wednesday, September 16, 2015 1:04:51 PM

Item ID: D2646

Revision ID:

Item Name: Aft Cap

Start Date: 9/21/15

Required Date: 9/30/15

Reference:

Accept

SEP 16 2015

N900040100

Setup Start

NS1

Stop

NS2

Cust Item ID:

Customer:

Start Qty: 25.00

Req'd Qty: 25.00

25

25

Approvals:

Process Plan: MJS

Date: SEP 16 2015

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

NR1

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2646

Rev C

100

0.00

100

Purchasing

Purchasing

PURCHASING

Memo

0.00

Issue P/O: 29807 1-Spin as per Dwg D2646 2-Material release
note required
Vendor: Sieg's Manufacturing

SEP 16 2015

50

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Packaging

Memo

0.01

Ensure Material Release Note is attached

OCT 05 2015

DAS
03
9-09

50

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Quality Control

Memo

0.00

50

DAS
38
9-09

OCT 06 2015

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :						
Misidentified	☐	Past Due	☐							

DQA: _____ Date: _____



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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence					
				OTHER :					

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Item ID: D2646 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Cap
Start Date: 9/21/15 Start Qty: 25.00 ***25*** Cust Item ID:
Required Date: 9/30/15 Req'd Qty: 25.00 ***25*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	White Gloss(Ref:4.3.5.1) per OSI005 4.3-Alum	0.00							
160	<i>m 12/27/14</i>					<u>50</u>	<u>0</u>	<u>15-10-16</u>	<u>DAS 34 9-89</u>
Powdercoat	Memo	0.00							
Powder Coating	START TIME: <u>8:50</u> OPEN TEMPERATURE: <u>8.20</u>								
	FINISH TIME: <u>8:20</u>								
170	QC3- Inspect Part Finish	0.00							
170						<u>x50</u>	<u>0</u>	<u>15/10/14</u>	<u>DAS 15 9-89</u>
QC	Memo	0.00							
Quality Control									
180		0.00							
180	Small Fab					<u>x50</u>	<u>0</u>	<u>15/10/14</u>	
Small Fab	Memo	0.01							
Small Fab	✓ Install inserts as per Dwg D2646								

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

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Required Date: 9/30/15 Req'd Qty: 25.00 ***25*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* QC Quality Control	<i>X</i> QC5- Inspect part completeness to step on W/O Memo	0.00 0.01							<u>50</u> <u>6</u> <u>15-10-19</u> <u>BL</u>
200 *200* Packaging Packaging	Identify as per dwg & Stock Location: <u>FP-001</u> Memo LOCATION : FP001	0.00 0.00							<u>x50</u> <u>6</u> <u>18/10/19</u>
210 *210* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.04							<u>ms</u> <u>OCT 19 2015</u>

gt 20151019

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				OTHER : _____			

Wednesday, September 16, 2015 1:05:00 PM

136885

D2646

Required Qty: 25.00

Comments:	IPP: G05.08.22Hole size revised in Step 5KJ/JLM		
	IPP Rev:H	Changed Inserts	07-02-19 JLM
	IPP rev I	changed inserts	07.06.11 EC

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

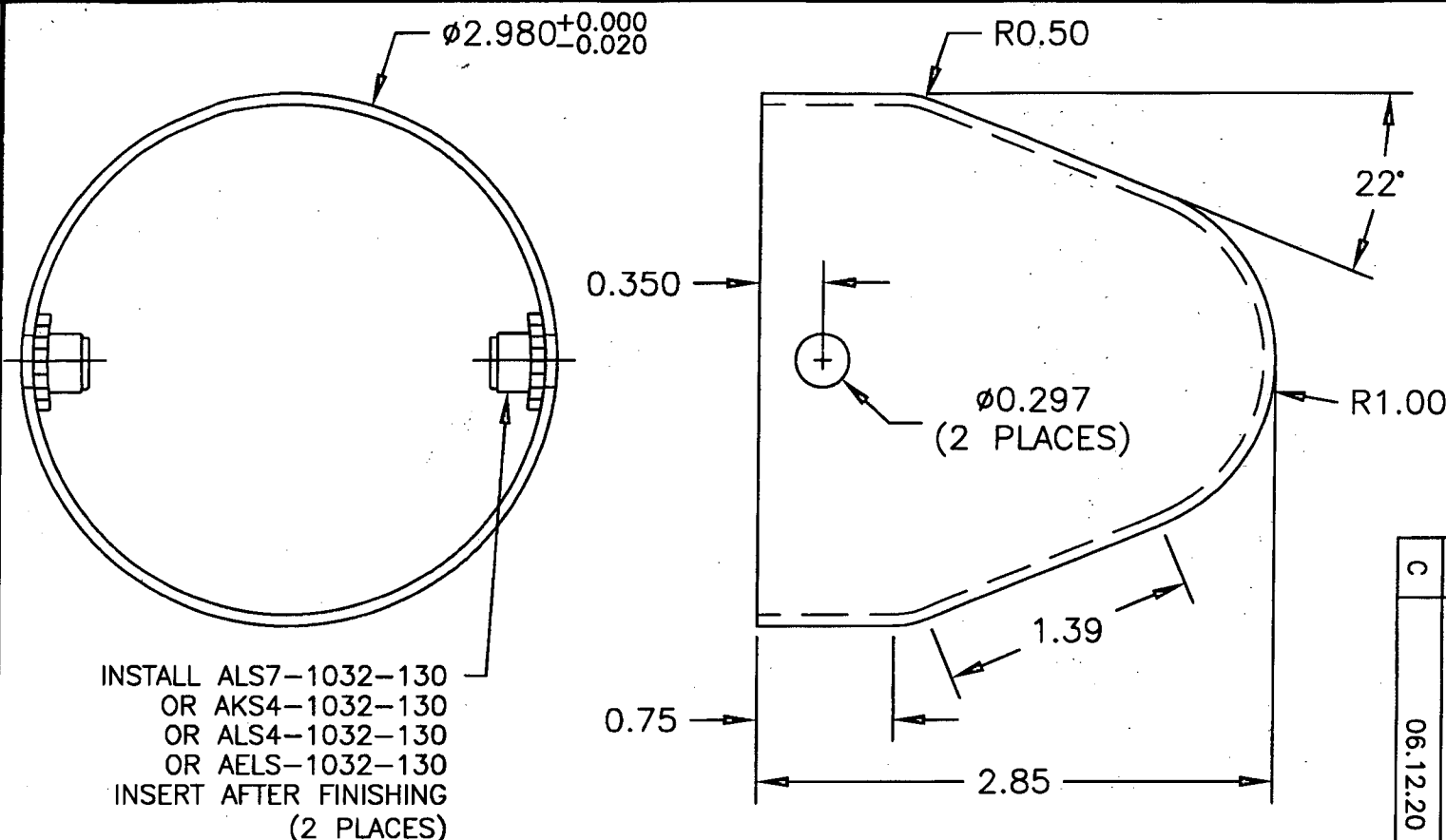
QA Closed: _____ Date: _____

Work Order update only ☐

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Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								



DESIGN	DS	DRAWN BY	PH	DART AEROSPACE USA, INC.
CHECKED	<i>PH</i>	APPROVED	<i>PH</i>	PORT HADLOCK, WA
DATE	06.12.20	DRAWING NO.	D2646	REV. C
		TITLE	AFT CAP	SHEET 1 OF 1
A	97.03.25	NEW ISSUE		SCALE 1:1
B	05.04.01	CHANGE TO CLOSED INSERTS		
C	06.12.20	CHANGE TO OPEN ENDED INSERTS		



D2646 AFT CAP

- 1) MATERIAL: ALUMINUM 1100-0 0.063 THICK (QQ-A-250/1)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

RELEASED

136885 MLJ

15-09-16

DQA: _____ Date: _____



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Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								



Sieg's Manufacturing Ltd.

Quality Metal Spinning & Metal Fabricating
6236 205 Street, Langley, BC, Canada V2Y 1N7
Phone: (604)530 7455 Fax: (604)530-7490
www.siegsfmfg.com

Packing Slip

Packing Slip No.: 45916
Date: 10/01/2015
Page: 1

Sold to:	Ship to:
DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7	DART AEROSPACE LTD. 1270 ABERDEEN STREET HAWKESBURY, ONTARIO K6A 1K7
Order No.: 29807	Sold By: LOWEY, ARLA
Shipped By:	Ship Date:
Tracking No.:	

Item No.	Unit	Description	Quantity	Backorder quantity
D2646P	Each	Aft Cap 15/10/15 50	50	

Comment:



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29807**

Purchase Order Date 9/16/2015 2:40:04 PM
PO Print Date 9/16/2015

Page Number 1 of 2

Order From :

VC-SIE001

Ship To : DART AEROSPACE LTD

SIEG'S MANUFACTURING LTD.
6236 - 205 STREET
LANGLEY, BC V2Y 1N7
CA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FA

Contact Name

Vendor Phone

604 530 7455

Ship To Contact

Ship To Phone

Ship Via:

FedEx Overnight collect

Ship Acct:

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 30

CAD

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D2646P	Aft Cap	10/6/2015 Yes 10/6/2015		50.00 Each	\$6.70	\$335.0
AS PER DWG D2646 REV. C B136885							
Line Total:							\$335.0
3	71401-45	PROCUREMENT QUALITY CLAUSES	10/6/2015 No 10/6/2015		1.00 15/10/15 SM	\$0.00	\$0.0
Procurement Quality Clauses A005 right of entry A012 chemical and physical test report A016 personnel qualification A017 raw material identification (as applicable) A026 certification of material conformance A041 quality management system A042 dart notification by supplier A043 retention of quality documents							

Note:

9/16/2015



Sieg's Manufacturing Ltd.

6236 205 Street Langley, B.C. Canada V2Y 1N7

Ph#: (604)530-7455 fax#: (604)530-7490

arla@siegsnfg.com

INSPECTION REPORT

Date: October 1, 2015

Customer: Dart Areospace

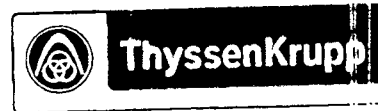
Packing Slip:

Part#:	Quantity	Material	Check holes	Insp. By.
D2646	50	14g 1100	N/a	AL

Notes:

Material Certification Attached: ____YES____

ThyssenKrupp Materials NA
Copper and Brass Sales Division



ThyssenKrupp Materials NA 15044 95A Avenue Surrey BC V4N 4P2

DELIVERY NOTE

SIEGS MANUFACTURING LTD.
6236 205 ST
LANGLEY BC V2Y 1N7



DATE:	01/06/2014
DOC. NO:	2402875712*
BOL. NO:	2402875712
ORDER NO:	1401788868
YOUR P/O:	1514
CUSTOMER NO:	10007550
Route:	B9M15
CONTACT:	Timothy Skidmore
TEL:	800-926-2600
FAX:	888-926-2600
EMAIL:	timothy.skidmore@thyssenkrupp.com

PST-1001-1682 OLD PST# R292133

We deliver at your own risk and account in accordance with our general delivery and payment terms.

ITEM	DESCRIPTION	NET QTY1 / QTY2	PACKAGE NO.
0010	ALFLR01243	100 PC	1003901956
	1100 Aluminum - O Sheet	4,267.469 lb	1003901957
	0.06300 X Width 48.0000 X Length 144		
	Non-Inal Chemistry/Act Physical		
	Standard Packaging		
	TAG NUMBER QUANTITY UOM VENDOR VENDOR PO HEAT/LOT PCS		
	1003602716 74 PC SKANA ALU 5400197413 11A711 74		
	ROHS COMPLIANT;ASTM B 209 2010		
	1003793591 26 PC SKANA ALU 5400200310 11B224 26		
	ROHS COMPLIANT;ASTM B 209 2010		

Total Gross Weight 4517.469 lb

All items, not declared as partial delivery, are final quantities.

Delivery Terms: PPD gem. Incoterms 2000 Prepaid

CERTIFICATION OF COMPLIANCE

We hereby certify that mercury or any of its compounds are not used in the processing and distribution of our products. The products we distribute are not hazardous in their received state.

For MSDS sheets go to www.copperandbrass.com. We hereby certify that the material above complies with the above specifications

John R Zambetti - Director of Quality Assurance

ThyssenKrupp Materials NA
Copper and Brass Sales Division
19044 95A Avenue
SURREY BC V4N 4E2
Tel.: +16048823493 Fax: +16048820586



Order number	Ord-pos	Del-pos	Part description
Customer PO	PO date	Quantity	Customer Part
MTR header	MTR type	Search criteria	Heat lot
			Sample number
C8A/1401788868	000020	900001	1100 Aluminum - O Sheet 0.06300 X Width
1514	12/18/2013	74 ST	
Att_001.PDF	NCAP	930230267220130003	11A711
C8A/1401788868	000020	900002	1100 Aluminum - O Sheet 0.06300 X Width
1514	12/18/2013	26 ST	
Att_002.PDF	NCAP	930235185120130004	11B224

Delivery number
2402875712
Date
12/19/2013

SIEGS MANUFACTURING LTD.
6236 205 ST
LANGLEY V2Y 1N7
CANADA

Skana Aluminum Company

Rolling Mill - Certified Metal

Certification of Properties and Analysis

Physical test: **11A711** Aluminum Alloy: **1100** Temper: **-O-** Thickness: **.0630**

Tested For: **Copper and Brass Sales** **6156** PO No: **5400197413-R0**

Chemical	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range	..		0.05	..	..	..	..	..	..		
Max Range	.95 Si	+ Fe	0.20	0.05	..	..	..	0.1	..	0.05	

1	13.28	4.34	31.80	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.44	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

2	13.38	4.25	31.90	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.43	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

3	13.44	4.46	32.70	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.43	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

4	13.55	4.58	31.40	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.44	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

5	13.31	4.47	30.30	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.17	.43	.10	.00	.00	.00	.00	.00	.01	.00

Al

99.20

Remarks: Tested By: **RJD**

Certified Date: **10 Oct 2013**

Certified By:
Lab Manager

Kenia Hampton

RJD .063 X 48.000 MF 5/5

ITEM # ALFLR01243

MEETS/EXCEEDS ASTM B209-10 SPEC

BLANKS: COILS TO PRESSROOM

Thu day, October 10, 2013

Melted/Manufactured in USA QF 824-1-2

Page 1 of 2

From: Copper and Brass Sales CA

Cust. SIEGS MANUFACTURING LTD.

CstAr

Wgt.: 3,157.927 LB

Del.: 2402875712

CstOr 1514

Date 12/19/2013

John R. Zambetti



Skana Aluminum Co
Rolling Mill - Certified Metal
Certification of Properties and Analysis

Physical test: 11B224 Aluminum Alloy: 1100 Temper: -O- Thickness: .0630

Tested For: Copper and Brass Sales 6156 PO No: 5400200310-R01

Chemical	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range	..		0.05	..	..	..	..	..	..		
Max Range	.95 Si	+ Fe	0.20	0.05	..	..	..	0.1	..	0.05	

Coil Ref. No.	1	2	3	4	5						
Tensile Strength KSI	14.10	14.06	14.04	14.06	14.14						
Yield Strength KSI	5.29	5.14	5.07	5.07	4.93						
% Elong. in 2 in.	30.80	30.40	30.70	31.30	32.30						

Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											

Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											

Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											

Remarks: Tested By: RJD

Certified Date: 21 Nov 2013

Certified By
Lab Manager

RJD .063 X 48.000 MF 5/5

ITEM # ALFLR01243

MEETS/EXCEEDS ASTM B209-10 SPEC

BLANKS: COILS TO PRESSROOM

Thursday, November 21, 2013

Melted/Manufactured In USA

QF 824-1-1

Page 1 of 1

From: Copper and Brass Sales CA

Cust. SIEGS MANUFACTURING LTD.

Del.: 2402875712

CstAr

CstOr 1514

Wgt.: 1,109.542 LB

Date 12/19/2013

John P. Zambetti



Skana Aluminum Co
Rolling Mill - Certified Metal
Certification of Properties and Analysis

Physical test: 11A711 Aluminum Alloy: 1100 Temper: -O- Thickness: .063

Tested For: Copper and Brass Sales

6156 PO No: 5400197413-R01

Chemical	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range	..		0.05	..	..	..	..	..	..		
Max Range	.95 Si	+Fe	0.20	0.05	..	..	..	0.1	..	0.05	

Coil Ref. No.	1	2	3	4	5						
Tensile Strength KSI	13.28	13.38	13.44	13.55	13.31						
Yield Strength KSI	4.34	4.25	4.46	4.58	4.47						
% Elong. in 2 in.	31.80	31.90	32.70	31.40	30.30						
Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											
Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											
Coil Ref. No.											
Tensile Strength KSI											
Yield Strength KSI											
% Elong. in 2 in.											

Remarks: Tested By: RJD

Certified Date: 10 Oct 2013

Certified By
Lab Manager

Kevin (L) Pen

RJD .063 X 48.000 MF 5/5

ITEM # ALFLR01243

MEETS/EXCEEDS ASTM B209-10 SPEC

BLANKS: COILS TO PRESSROOM

Thursday, October 10, 2013

Melted/Manufactured in USA

QF 824-1-1

Page 1 of 1

From: Copper and Brass Sales CA

Cust. SIEGS MANUFACTURING LTD.

Del.: 2402875712

CstAr

CstOr 1514

Wgt.: 3,157.927 LB

Date 12/19/2013

John L. Jacobetti

Skana Aluminum Company

Rolling Mill - Certified Metal

Certification of Properties and Analysis

Physical test: 11B224 Aluminum Alloy: 1100 Temper: -O- Thickness: .0630

Tested For: Copper and Brass Sales 6156 PO No: 5400200310-R01

Chemical	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others	Al
Min Range	..	..	0.05	..	..	..	..	..	..	..	..
Max Range	.95 Si	+ Fe	0.20	0.05	..	..	..	0.1	..	0.05	..

1	14.10	5.29	30.80	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.18	.43	.12	.02	.01	.00	.00	.00	.01	.00

Al

99.20

2	14.08	5.14	30.40	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.18	.43	.12	.02	.01	.00	.00	.00	.01	.00

Al

99.20

3	14.04	5.07	30.70	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.18	.43	.12	.02	.01	.00	.00	.00	.01	.00

Al

99.20

4	14.06	5.07	31.30	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.18	.43	.12	.02	.01	.00	.00	.00	.01	.00

Al

99.20

5	14.14	4.93	32.30	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Others
				.18	.43	.12	.02	.01	.00	.00	.00	.01	.00

Al

99.20

Remarks: Tested By: RJD

Certified Date: 21 Nov 2013

Certified By:
Lab Manager

RJD .063 X 48.000 MF 5/5

ITEM # ALFLR01243

MEETS/EXCEEDS ASTM B209-10 SPEC

BLANKS: COILS TO PRESSROOM

Thursday, November 21, 2013

Melted/Manufactured In USA QF 824-1-2

Page 1 of 2

From: Copper and Brass Sales CA

Cust. SIEGS MANUFACTURING LTD.

Del.: 2402875712

CstAr

CstOr 1514

Wgt.: 1,109.542 LB

Date 12/19/2013

John R. Zambetti

COPPER AND BRASS SALES

MATERIAL TYPE

ALUMINIUM ALLOYS

PRODUCT DESIGNATION

1100 1350 3003 3004 3105 5005 5083 5086 5182 5454 6061 6063

"WARNING"

SMALL CHIPS, FINE TURNINGS AND DUST MAY IGNITE READILY. EXPLOSIONPOTENTIAL MAY BE PRESENT WHEN:DUST OR FINES ARE DISPERSED IN THE AIR; FINE, DUST OR MOLTEN ALU. II NUMARE IN CONTACT WITH CERTAINMETAL OXIDES; OR, CHIPS, FINES, DUST OR MOLTEN ALUMINUM ARE IN CONTACT WITH WATER OR MOISTURE. KEEP AWAY FROM IGNITION SOURCE. USE EXPLOSION- PROOF VENTILATION. KEEP MATERIAL DRY.

INHALING LARGE AMOUNTS OF COPPER, MAGNESIUM OXIDE, MANGANESE OXIDE, AND ZINC OXIDE FUMES OR DUST MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS. CHRONIC OVEREXPOUSURE TO COPPER MAY CAUSE THICKENING OF THE SKIN; AND SKIN, TEETH, AND HAIR DISCOLORATION. CHRONIC OVEREXPOUSURE TO MANGANESE DUST CAN CAUSE CENTRAL NERVOUS SYSTEM DAMAGE, SCARRING OF THE LUNGS AND REPRODUCTIVE HARM IN MALES. TARGET ORGAN IS PRIMARILY THE LUNG, BUT REPEATED HIGH EXPOSURE CAN ALSO AFFECT THE LIVER. CHRONIC OVEREXPOSURE TO TIN DUST OR IRON OXIDE DUST/FUME MAY CAUSE LUNG SIDEROSIS. CHRONIC OVEREXPOUSURE TO SILICON DUST CAN CAUSE CHRONIC BRONCHITIS.

THIS PRODUCT ALSO CONTAINS LEAD AND CHROMIUM COMPOUNDS. LEAD IS KNOWN TO CAUSE REPRODUCTIVE TOXICITY AND IS A KNOWN CARCINOGEN. EXPOSURE TO CHROMIUM DUST OR FUME MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS AND KIDNEY AND KIDNEY AND LIVER DAMAGE. UNDER HIGH TEMPERATURES, HEXAVALENT CHROMIUM MAY BE PRODUCED, IF IN THE INSOLUBLE FORM, IT IS A CONFIRMED HUMAN CARCINOGEN. (CALIFORNIA PROPOSITION 65). IF COATED WITH OIL, MAY CAUSE SKIN IRRITATION/DERMATITIS BY CONTACT. WELDING FUME IS LISTED AS A POSSIBLE CARCINOGENIC TO HUMANS. READ THE ALUMINUM/ALUMINUM ALLOYS MATERIAL SAFETY DATA SHEET (MSDS) ON FILE WITH YOUR EMPLOYER BEFORE WORKING WITH THIS MATERIAL.

* If processing or recycling produces particulate, use exhaust ventilation or other controls designed to prevent exposure to workers. Examples of such activities include melting, welding, grinding, abrasive sawing, sanding and polishing. Any activity which abrades the surface of this material can generate airborne particulate. Use appropriate NIOSH approved respiratory protection (P95; P100 for lead with, quantitative fit testing required) if exposures exceed the permissible limits.

* The Occupational Safety and Health Administration (OSHA) have set mandatory limits on occupational exposures. * A minimum, in solid form and as contained in finished products presents no special health risk.

* Sold for manufacturing purposes only. This product can be recycled; contact your sales representative.

The Occupational Safety and Health Administration require employers to provide training in the proper use of this product.

For additional information, call or write to Copper and Brass Sales, 22355 West Eleven Mile Road, Southfield, MI 48033, telephone 248-233-5600, or visit our web site @ www.copperandbrass.com.

ALUMINUM LABEL NO. 300-1088

ISSUED 10/01/2008